Manohar Korikana

Boulder, CO | korikanamanohar2@gmail.com | 303-875-5273 | www.linkedin.com/in/korikana-manohar/

Summary

Data science and AI engineering professional with experience in building data pipelines, machine learning models, agentic AI systems, and LLM-based workflows. Skilled in Python, cloud platforms, and MLOps, with a focus on delivering scalable, data-driven and AI-powered solutions.

Experience

AI Engineering Intern | beaconAI **Sep 2025 – Present**

- Designed and deployed multi-agent AI systems using LangGraph and AutoGen to automate healthcare operations and workflow coordination, reducing manual administrative effort and improving task execution efficiency.
- Built an end-to-end RAG architecture using dense embeddings and vector similarity search to retrieve semantically relevant document chunks, integrating Claude, Gemini, and OpenAI (GPT) APIs to generate accurate, context-aware, and human-readable responses.
- Developed scalable LLM fine-tuning workflows using domain-specific datasets, implementing parameter-efficient tuning strategies to imrpove response quality and task specialization.
- Developed backend services and REST APIs to orchestrate agent execution, model inference, and database interactions, ensuring seamless integration between AI systems, cloud services, and enterprise applications.
- Implemented containerized deployments with Docker and Kubernetes, enabling scalable inference workloads, high availability, and production-grade monitoring of AI services.

Software Engineer I | NCR Atleos **Feb 2023 – Jul 2024**

- Contributed to backend ATM product functionality using C++ (device-level programming), integrating system components via COM-based DLL modules within enterprise architecture.
- Designed Python automation scripts to streamline Jira workflow management, reducing manual ticket handling and automating notifications and validation checks.
- Improved backend stability and operational efficiency through systematic debugging and feature integration across ATM software components.

Data Science Intern | Verzeo **Sep 2021 – Nov 2021**

- Conducted exploratory data analysis (EDA) on multi-year car sales datasets, identifying seasonal trends and key revenue drivers.
- Developed regression-based forecasting models (Linear Regression, Random Forest, Gradient Boosting) to predict future sales performance.
- Evaluated model performance using cross-validation and error metrics (MAE, RMSE), selecting optimal models for business reporting.
- Built interactive Tableau dashboards to communicate predictive insights and business trends to stakeholders.

Projects

AI-Driven Multi-Agent Enterprise Automation Platform **2025**

- Developed an AI-driven automation platform integrating intelligent agents for enterprise workflows, implementing agent orchestration, data pipelines, REST APIs, and LLM-based email content extraction for automated task routing, along with MLOps practices using FastAPI, Docker, Kubernetes, and Google Cloud Platform (GKE, Vertex AI, Cloud APIs) to support scalability and deployement.

End-to-End Autonomous ML Pipeline (DataPilot) **2025**

- Built a complete machine learning pipeline using Python, Scikit-learn and streamlit that performs dataset profiling (32 meta-features), data cleaning, feature engineering, visualization, and training across 21 classification and regression models with cross-validation and ensemble creation, while leveraging LLMs to transform numerical summary statistics and model outputs into human-readable insights.
- Implemented an RL-based model selector to map dataset characteristics to the optimal model choice, followed by prediction generation and scalable deployment using Docker and Kubernetes.

Education

University of Colorado Boulder | Master of Science in Data Science **Aug 2024 – May 2026**

- Coursework: Neural Networks, Statistical Methods, Data Mining, Machine Learning, Data Center Scale Computing.

Vasavi College of Engineering | Bachelor Of Engineering in Electronics and Communication **Aug 2019 – May 2023**

- Coursework: C++, C, SQL, Data Structures, Algorithms, Object-Oriented Programming, System Design, Data Base Management Systems, Image & Video Processing, Machine Learning, Probability, Engineering Mathematics.

Skills

Programming & Tools: Python, SQL, C++, HTML, CSS, JavaScript, Bash, Linux, Git, GitHub, Git, JSON, REST APIs
Machine Learning & Statistical Modeling: Scikit-learn, Regression, Classification, Clustering, Ensemble Methods, Time-Series Forecasting, Hypothesis Testing, Model Evaluation, Feature Engineering, Reinforcement Learning
Deep Learning & Generative AI: TensorFlow (Keras), PyTorch, CNNs, RNNs, Transformers, NLP, Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), Embeddings, Prompt Engineering, Model Fine-Tuning, Agentic AI Systems (LangGraph, AutoGen, CrewAI)
Data Engineering, Data Processing & Databases: Hadoop, Apache Spark (PySpark), Kafka, Hive, ETL Pipelines, MySQL, PostgreSQL, Vector Databases, NumPy, Pandas
Cloud & MLOps: AWS, Google Cloud Platform (GCP),Docker, Kubernetes, MinIO, CI/CD, Model Deployment, Monitoring
Data Visualization: Tableau, Power BI, Matplotlib, Seaborn, Microsoft Excel